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**UNITED STATES DEPARTMENT OF COMMERCE****Pat nt and Trad mark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/317,409 05/24/99 LUCAS

S 1590.3039

005514 IM22/0620  
FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK NY 10112

EXAMINER

BEELMDLJ

ART UNIT

PAPER NUMBER

1771

DATE MAILED:

06/20/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/317,409

Applicant(s)

LUCAS ET AL.

Examiner

Jenna-Leigh Befumo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12,39-46,55,57-76 and 87 is/are pending in the application.
- 4a) Of the above claim(s) 1-12,39-46,60-76 and 87 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 55 is/are rejected.
- 7) ☒ Claim(s) 57-59 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Prosecution Application***

1. The request filed on April 20, 2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/317409 is acceptable and a CPA has been established. An action on the CPA follows.

### ***Response to Amendment***

2. Amendment A, submitted as Paper No. 11 on April 20, 2001, has been entered. Claims 13 – 38, 47 – 54, 56, and 77 – 86 have been cancelled. Claims 55 and 57 – 59 have been amended. Therefore, the pending claims are 1 – 12, 39 – 46, 55, 57 – 76, and 87. Claims 1 – 12, 39 – 46, 60 – 76, and 87 are withdrawn from consideration as being drawn to a non-elected invention.

3. Amendment A is sufficient to withdraw the USC 112 2<sup>nd</sup> paragraph rejection set forth in section 3 of the previous Office Action.

4. Amendment A is sufficient to overcome the USC 102 rejection over Cordova et al. (4,857,405) and the USC 102/103 rejections over Robinson (4,695,501) and over Hirschbueler et al. (4,539,253) set forth in sections 5 – 8 of the previous Office Action. The amended claim is now drawn to a stiffness-treated prepreg ply in a honeycomb sandwich precursor structure instead of just the stiffness-treated prepreg ply. Thus, the rejections are withdrawn.

### ***Claim Objections***

5. Claims 57 – 59 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite

Art Unit: 1771

the claims in independent form. Claims 57 – 59 depend from claim 56 which has been cancelled. These claims have not been further examined at this time.

***Claim Rejections - 35 USC § 102/103***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claim 55 is rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Corbett et al. (5,895,699).

Corbett et al. discloses a honeycomb composite shown in Figure 1 and 2. Figure 1 shows that there are two outer prepreg layers surrounding a honeycomb core. Figure 2 shows, in more detail, the outer layers and how they are connected to the honeycomb core. The skin layer **102** comprises multiple prepreg sheets comprising carbon fiber impregnated with bismaleimide — thermoset resin (column 4, lines 64 – 67). Next is an adhesive layer **108** tailored to achieve an adequate bond between the skin **102** and the barrier film **110** (column 5, lines 1 – 2). A second adhesive layer **112** comprising a scrim supported adhesive, bonds the barrier film **110** to the honeycomb core **106**. Thus, Corbett et al. teaches a core with two outer prepreg plies. At least one outer ply comprises the skin layers, which would equate to Applicants claimed stiffness-treated fabric, a fabric with a polymeric material, the bismaleimide thermoset resin, disposed on

Art Unit: 1771

at least some of the fibers. The composite taught by Corbett et al. further comprises the adhesive layer adjacent the skin layer, or Applicant's claimed resin system. Thus, the skin layer **102** and the adhesive layer **108** form Applicant's stiffness-treated prepreg ply.

The limitation of greater frictional resistance between a stiffness-treated prepreg ply and another stiffness-treated or untreated prepreg ply than two untreated prepreg plies is not given patentable weight at this time. First the limitation as written, refers to the frictional resistance when the stiffness-treated prepreg ply is "disposed on a second prepreg ply." However, as claimed the honeycomb sandwich precursor comprises a honeycomb core between the two prepreg plies. Thus, the stiffness-treated prepreg ply is not adjacent to the other prepreg layer.

Hence, the frictional resistance is not a positive limitation of the honeycomb sandwich precursor since the stiffness-treated prepreg would be capable of the claimed frictional resistance if it were "disposed on a second prepreg ply." Since the claims only requires the ability of the stiffness-treated prepreg ply to have an increased frictional resistance than it does not constitute a limitation in the patentable sense.

In the alternative, if the limitation were given patentable weight, it is presumed that the frictional resistance would be inherent to the stiffness-treated prepreg plies taught by Corbett et al. Support for said presumption is found in the use of similar materials (i.e. prepregs made with disposed on the fabric and a resin systems) and in the similar production steps (i.e. plying the prepregs to the honeycomb core) used to produce the honeycomb composite structure. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed frictional resistance would obviously have been provided by the process disclosed by Corbett et al. *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the

Art Unit: 1771

providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Thus, claim 55 is anticipated by Corbett et al.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (8:00am - 4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3599 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo  
June 15, 2001



CHERYL JUSKA  
PATENT EXAMINER